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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,833	05/13/2005	Stefano Cerbini	2563-1001	8979
<div>466                      7590                      02/20/2009</div> <div>YOUNG &amp; THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314</div>				
EXAMINER				
CHOL PETER Y				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
02/20/2009		PAPER		

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/534,833  
Filing Date: May 13, 2005  
Appellant(s): CERBINI ET AL.

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Robert E. Gozner  
For Appellants

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed December 8, 2008, appealing from the Office action mailed December 6, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

Examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

Appellants' statement of the grounds of rejection to be reviewed on appeal is substantially correct.

**Grounds of Rejection Not to be Reviewed on Appeal**

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by Examiner:

35 U.S.C. 112 second paragraph rejection of claims 27-36,

35 U.S.C. 102(b) rejection of claims 15, 16 and 26-30 as being anticipated by McCormack,

35 U.S.C. 103(a) rejection of claims 21 and 36 as being obvious over McCormack in view of Langley.

The grounds of rejection withdrawn correspond to Appellants' First Ground (Section 7.1), Second Ground (Section 7.2), and Sixth Ground (Section 7.6) in Appellants' Brief.

**(7) Claims Appendix**

A substantially correct copy of appealed claims 15-21 and 26-36 appear on pages 21-24 of the Appendix to the Appellants' brief. The minor errors are as follows: claims 27-29 recite status identifiers as "new." However, claims 27-29 were newly added prior to the Final Rejection of December 6, 2007, and are not new claims for purposes of Appeal. Appellants' recitation of claims 27-29 as "new" appears to be an obvious typographical error as the prosecution history indicates that the claims have been previously presented.

**(8) Evidence Relied Upon**

5,589,249	BODFORD	12-1996
5,865,926	WU	02-1999
5,855,999	McCORMACK	01-1999
EP 0360209	LANGLEY	03-1990

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102/103***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 15-20 and 26-35 are rejected under 35 U.S.C. 102(b) as being anticipated by, or alternatively under 35 U.S.C. 103(a) as obvious over, USPN 5,589,249 to Bodford.

Regarding claims 15-20, 26 and 27, Bodford teaches a gown, jacket or trousers, suitable as protective clothing against biological agents and exhibiting very high level of protection against the penetration of liquids and microorganisms, mechanical resistance properties as well as outstanding softness, drapeability and comfort, comprising a laminate of an inner layer of non-woven polypropylene with an outer layer of polyethylene film, a unit weight ratio between polypropylene and polyethylene ranging from 70:30 to 50:50 (see entire document including column 2 lines 61-67, column 3 lines 6-21, column 4 lines 23-51, column 7 line 37 to column 8 line 31, column 8 lines 56-67, column 9 lines 10-37, column 12 lines 7-24, Table II).

Regarding claim 16, the ratio in unit weight between polypropylene and polyethylene ranges from 65:35 to 55:45 (column 9 lines 10-37, Table II).

Regarding claim 17, the thickness of the material ranges between 101.6 and 1041.4 microns, and the unit weight ranges between 55 and 75 g/m<sup>2</sup> (column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II).

Regarding claim 18, the inner layer of nonwoven polypropylene has a thickness ranging between 76.2 and 1016 microns and unit weight ranging between 35 and 45 g/m<sup>2</sup> and the outer polyethylene film has a thickness ranging between 30 and 70 microns and unit weight ranging between 20 and 30 g/m<sup>2</sup> (column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II).

Regarding claim 19, the thickness of the material ranges between 101.6 and 1041.4 microns and the unit weight ranges between 60.0 and 67.5 g/m<sup>2</sup> (column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II).

Regarding claim 20, the inner layer of nonwoven polypropylene has a thickness ranging between 76.2 and 1016 microns and unit weight ranging between 37.5 and 40.0 g/m<sup>2</sup> and the outer polyethylene film has a thickness ranging between 40 and 60 microns and unit weight ranging between 22.5 and 27.5 g/m<sup>2</sup> (column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II).

Regarding claim 26, the inner layer provides a barrier against liquids and microorganisms, is physiologically safe, and is breathable (column 2 lines 61-67, column 7 line 38 to column 8 line 67, column 12 lines 7-24).

Regarding claim 27, as best Examiner can determine, the outer layer is microporous with a pore size low enough to prevent passages of liquids and microorganisms which allow moisture to pass on a molecular level (column 2 lines 61-67, column 7 line 38 to column 8 line 67, column 12 lines 7-24).

Regarding claims 28-35, Bodford teaches a protective garment, comprising a laminate of an inner layer of nonwoven polypropylene with an outer layer of polyethylene film, a unit weight ratio between polypropylene and polyethylene ranging from 70:30 to 50:50, wherein the inner layer provides a barrier against liquids and microorganisms, is physiologically safe, and is breathable, and the outer layer is microporous with a pore size low enough to prevent passages of liquids and microorganisms which allow moisture to pass on a molecular level (see entire document including column 2 lines 61-67, column 3 lines 6-21, column 4 lines 23-51, column 7 line 37 to column 8 line 31, column 8 lines 56-67, column 9 lines 10-37, column 12 lines 7-24, Table II).

Regarding claim 29, the protective garment is a gown, jacket or trousers (column 7 line 38 to column 8 line 67).

Regarding claim 30, as best Examiner can determine, the protective garment is protective clothing against biological agents and exhibits a very high level of protection against the penetration of liquids and microorganisms, mechanical resistance properties as well as outstanding softness, drapeability and comfort (column 2 lines 61-67, column 7 line 38 to column 8 line 67, column 12 lines 7-24).

Regarding claim 31, the ratio in unit weight between polypropylene and polyethylene ranges from 65:35 to 55:45 (column 9 lines 10-37, Table II).

Regarding claim 32, the thickness of the material ranges between 101.6 and 1041.4 microns, and the unit weight ranges between 55 and 75 g/m<sup>2</sup> (column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II).

Regarding claim 33, the inner layer of nonwoven polypropylene has a thickness ranging between 76.2 and 1016 microns and unit weight ranging between 35 and 45 g/m<sup>2</sup> and the outer polyethylene film has a thickness ranging between 30 and 70 microns and unit weight ranging between 20 and 30 g/m<sup>2</sup> (column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II).

Regarding claim 34, the thickness of the material ranges between 101.6 and 1041.4 microns and the unit weight ranges between 60.0 and 67.5 g/m<sup>2</sup> (column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II).



Regarding claim 35, the inner layer of nonwoven polypropylene has a thickness ranging between 76.2 and 1016 microns and unit weight ranging between 37.5 and 40.0 g/m<sup>2</sup> and the outer polyethylene film has a thickness ranging between 40 and 60 microns and unit weight ranging between 22.5 and 27.5 g/m<sup>2</sup> (column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II).

In the event it is shown that Bodford does not disclose the claimed invention with sufficient specificity, the invention is obvious because Bodford discloses the claimed constituents and discloses that they may be used in combination based on the intended application.

***Claim Rejections - 35 USC § 103***

3. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,865,926 to Wu in view of McCormack.

Regarding claims 15 and 16, Wu teaches a gown, jacket or trousers, suitable as protective clothing against biological agents and exhibiting very high level of protection against the penetration of liquids and microorganisms, mechanical resistance properties as well as outstanding softness, drapeability and comfort, comprising a laminate of an inner layer of non-woven polypropylene with an outer layer of polyethylene film (see entire document including column 2 lines 2-29, column 3 line 2 to column 4 line 42).

Regarding claims 15 and 16, Wu does not appear to disclose that the unit weight ratio between polypropylene and polyethylene ranges from 70:30 to 50:50, or from 65:35 to 55:45. Since Wu is silent with regards to the weight of the microporous polyethylene film, it would

have been necessary and thus obvious to look to the prior art for conventional weights of microporous polyethylene films. McCormack provides this conventional teaching showing that it is known in the garment art to use a microporous polyethylene film on a polypropylene nonwoven wherein the film weighs less than about  $35 \text{ g/m}^2$  (McCormack, column 1 lines 16-31, column 4 lines 3-11, column 8 lines 17-34). Therefore, it would have been obvious to one having ordinary skill in the garment art at the time the invention was made to make the microporous polyethylene film of Wu with the film weight as taught by McCormack, motivated by the expectation of forming the microporous polyethylene film and polypropylene nonwoven protective clothing which is soft and breathable.

4. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu in view of McCormack, as applied to claims 15 and 16, and further in view of Bodford.

Regarding claims 17-20, Wu in view of McCormack teaches that the unit weight of the material ranges between  $55$  and  $75 \text{ g/m}^2$  or  $60.0$  and  $67.5 \text{ g/m}^2$ , that the unit weight of the nonwoven polypropylene ranges between  $35$  and  $45 \text{ g/m}^2$  or  $37.5$  and  $40.0 \text{ g/m}^2$ , that the polyethylene film unit weight ranges between  $20$  and  $30 \text{ g/m}^2$  or between  $22.5$  and  $27.5 \text{ g/m}^2$ , and that the thickness of the polyethylene film ranges between  $30$  and  $70$  microns or between  $40$  and  $60$  microns (Wu, column 3 line 2 to column 4 line 42; McCormack, column 8 lines 17-34). However, Wu in view of McCormack does not appear to teach the claimed thickness of the nonwoven or the claimed thickness of the entire material. Since Wu in view of McCormack is silent with regards to the thickness of the material, it would have been necessary and thus obvious to look to the prior art for conventional thicknesses of composites comprising

microporous polyethylene films laminated to a polypropylene nonwoven. Bodford provides this conventional teaching showing that it is known in the garment art to form garments comprising microporous polyethylene films laminated to a polypropylene nonwoven wherein the thickness of the nonwoven is 76.2-1016 microns (Bodford, column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II). Therefore, it would have been obvious to one having ordinary skill in the garment art at the time the invention was made to make the garment of Wu in view of McCormack with the nonwoven thickness as taught by Bodford, motivated by the expectation of successfully practicing the invention of Wu in view of McCormack. Additionally, the polypropylene nonwoven and polyethylene film composite would therefore have a thickness between 82.55 microns to preferably 1066.8 microns.

5. Claims 21 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodford in view of EP 0360208 to Langley.

Regarding claims 21 and 36, Bodford does not appear to teach that the joints are made by heat welding. Since Bodford is silent with regards to the method of sealing the joints, it would have been necessary and thus obvious to look to the prior art for conventional methods. Langley provides this conventional teaching showing that it is known in the garment art to fabricate garments using a heat-sealing methods when the garments comprise a polyethylene film and a polypropylene nonwoven (page 3 lines 3-41). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the garment of Bodford from heat-sealing method of Langley, motivated by the expectation of using a suitable method for forming garments comprising a polyethylene film and polypropylene nonwoven.

**(10) Response to Argument**

Rejection under 35 U.S.C. 112 second paragraph rejection of claims 27-36

Although this rejection has been withdrawn by Examiner, it should be noted that Appellants argue that the intended scope of the limitation “low enough to prevent passage of liquids and microorganisms” is a pore size of 0.1-0.2 $\mu$ m (*see* Appellants’ Brief, paragraph bridging pages 4 and 5). It should also be noted that Appellants improperly recite the pall.com website under Section 7.1, which was not previously made of record and is not currently recited in Section 10 under Evidence Appendix. However, independent from Appellants’ arguments, the rejection is withdrawn. Although the recitation of the website in Appellants’ arguments and the absence of the recitation of the website under the Evidence Appendix is improper for purposes of Appeal, the recitation of the website is no longer germane to the issues on Appeal.

Rejection of claims 15, 16 and 26-30 under 35 U.S.C. 102(b) as anticipated by McCormack

The anticipation rejection of claims 15, 16 and 26-30 based on McCormack is withdrawn by Examiner.

Rejection of claims 15-20 and 26-35 under 35 U.S.C. 102(b) as being anticipated by, or alternatively under 35 U.S.C. 103(a) as obvious over Bodford

Contrary to the current rejection, Appellants argue that Bodford fails to disclose “a laminate of an inner layer of non-woven polypropylene with an outer layer of polyethylene film, a unit weight ratio between polypropylene and polyethylene ranging from 70:30 to 50:50.”

Additionally, Appellants argue that there is no teaching or suggestion of a ratio between polypropylene and polyethylene in Bodford. Appellants recite *Harries v. Air King Products Co.*, 183 F.2d 158, 86 USPQ 57 (2d Cir. 1950), in support. Additionally, Appellants argue that Bodford fails to disclose a two layer garment suitable for protection against biological agents and combining a high level of protection with comfort and softness.

Regarding Appellants' arguments, Examiner respectfully disagrees. Appellants' claimed invention is directed to protective clothing which exhibits very high level of protection against the penetration of liquids and microorganisms, comprising a laminate of an inner layer of nonwoven polypropylene and an outer layer of polyethylene film, having a unit weight ratio between polypropylene and polyethylene ranging from 70:30 to 50:50. Bodford teaches a vapor permeable, liquid impermeable protective fabric comprising a nonwoven fabric substrate and at least two vapor permeable and liquid impermeable film substrates (Bodford, column 2 lines 61-67). Bodford teaches that the nonwoven web may comprise a polypropylene web optimally having a basis weight of 1.5 ounce per square yard (*Id.*, column 7 lines 63-65). Bodford teaches that the film substrates are preferably thermoplastic films of microporous structure such as low-density polyethylene (*Id.*, column 8 lines 9-12). Therefore, Bodford teaches the claimed structure.

Appellants appear to be arguing that Bodford does not teach the claimed unit weight ratio. As set forth in *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985), "[W]hen, as by a recitation of ranges or otherwise, a claim covers several compositions, the claim is anticipated' if one of them is in the prior art" (citing *In re Petering*, 301 F.2d 676, 682, 133 USPQ 275, 280 (CCPA 1962)) (emphasis in original). Although Bodford does not

expressly teach the unit weight ratio as Appellants claim, as shown in Example 1 of Bodford, the unit weight ratio of Bodford is within the scope of the claimed ratio. In Example 1, Bodford teaches that the composite comprises Film A which comprises a polyethylene film, a nonwoven polypropylene web weight about 1.0 ounces per square yard, and Film B which is the same as Film A. Example 1 recites that the web and Film A were bonded together at an add-on of 9 grams per square meter and Film B was bonded under the same conditions as Film A.

Referring to Table II of Bodford which discloses the physical properties of Example 1, the Table shows that the weight of the composite of Example 1 is 2.65 ounces per square yard. Since Example 1 teaches that the weight of the nonwoven is about 1.0 ounces per square yard, and since Example 1 only recites the components of the composite to comprise the nonwoven, Film A, Film B, and the adhesives, it naturally flows that the weight of Film A, Film B, and the adhesives weigh about 1.65 ounces per square yard, which is 2.65 ounces per square yard less the amount of nonwoven. Since the two adhesives are identical and each weigh 9 grams per square meter, the weight of the adhesives is 18 grams per square meter which is equivalent to about 0.53 ounces per square yard (based on 1 gram per square meter equal to 1 ounce per square yard times 33.91). Therefore, the weight of the two films is about 1.65 less 0.53 which is about 1.12 and the weight of each film is about 0.56 ounces per square yard. Therefore the unit weight ratio between the polypropylene nonwoven and the polyethylene in one of the films is about 64:36. Since Bodford recites a substantially similar and/or identical structure and composition as the claimed invention, wherein the unit weight ratio as expressly taught in an Example of Bodford is within the claimed unit weight ratio, the claimed invention is anticipated by Bodford.

Regarding Appellants' reliance on *Harries* that it is improper to extract ratios from raw data, Examiner respectfully disagrees. First, as set forth above, the Federal Circuit in *Titanium Metals Co.* sets forth that a range is anticipated if one of them is in the prior art. Since Bodford teaches an Example which expressly recites the structure and composition of the claimed invention, Bodford anticipates the claimed invention.

Second, regarding the cited case, *Harries*, the case involves litigation between two parties and is not directed to the prosecution of the patents which involve early electron discharge tubes. The analysis set forth by the Court involves the decision by the lower court regarding patent validity and patent infringement. It should be noted that a patent validity analysis is not identical to a patent prosecution analysis as patent validity is an element of an infringement claim or defense for a patent already granted based on the prosecution history, whereas patent prosecution compiles the record involved in determining whether a patent should be granted based on the prior art.

Specifically regarding the segment of the decision which Appellants rely, Appellants' reasoning that "deriving a ratio from individual components or measurements has been found to be impermissible" does not appear to be supported by *Harries*. In the *Harries* case, the issue regarding the ratio revolved around a discussion as to whether the inclusion of "ratio," not in the claims but added as an amendment to the specification, was permissible, even though the specification as originally disclosed did not teach such a ratio. In finding the patent valid, the Court held that the plaintiff, Harries, claimed specifically "long streams" and not various ratios, such that "we should not be justified in taking the figures, even those accompanying the original specifications, to indicate that the ratio of length to cross-section was a part of the invention" (86

USPQ at 60). Contrary to Appellants' assertion, *Harries* held that the specification may be amended to include a "ratio" even though that ratio was not necessarily disclosed in the specification, but the scope of the patent is limited to that which was originally disclosed in the specification. Therefore, in an *infringement* analysis, a patentee may not extrapolate inventions from a single patent that are not within the scope of the patented invention, as a basis for infringement.

Appellants in the presently examined application appear to argue that *Harries* supports the contention that Examiner may not rely on prior art to teach a ratio in determining if a claim is anticipated, if the prior art does not expressly teach the ratio. However, as set forth above, *Harries* only supports the contention that "ratio" may be included in a patent even though it was not disclosed in the specification as originally filed, but the scope and validity of the patent will be limited. The section in Appellants' Remarks of October 19, 2007, attributed to Judge Hand which Appellants recite, appears to state that "ratio" cannot be found to be within the scope of an invention since the ratio of length to cross-section was not part of the invention (*see Harries*, "[t]he claims in suit of the first and third patents must therefore be confined to 'deflectable jets of comparatively great length'") (Id. at 59). *Harries* does not appear to support the premise that during patent prosecution, an Examiner may not rely on prior art to teach a ratio which is not expressly taught by the prior art but is inherent to that disclosed in the prior art.

Appellants' argue that Examiner has not proffered extrinsic evidence to prove the characteristics allegedly inherent in Bodford. Examiner respectfully disagrees. As set forth above, Bodford teaches an Example comprising the claimed structure having a unit weight ratio within the claimed range. Therefore, Bodford anticipates the claimed invention.



Additionally, to establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). In relying upon the theory of inherency, Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). As set forth above, based on the information set forth in Bodford, the unit weight ratio necessarily flows from the teachings of the prior art.

Appellants argue that Bodford fails to disclose a two-layer garment suitable for protection against biological agents and combining a high level of protection with high comfort and softness. Examiner respectfully disagrees. It should be noted that Appellants specification does not recite objective or quantitative characteristics associated with a “high level of protection” or “high comfort and softness.” However, Appellants Brief sets forth that “properties of softness, drapeability and comfort are difficult to quantify but would be known from the experience of one of skill in the art (and also from the view of a skilled user of protective clothing)” (*see* Appeal Brief at page 6, first full paragraph).

Bodford teaches that the composites are suitable for use in medical and industrial protective garments such as surgical gowns, disposable garments etc. (Bodford, column 7 lines 38-41). Additionally, Bodford teaches that the nonwoven inner layer typically feels soft, pliable

and comfortable (Id., column 7 lines 61-63), while providing strength and dimensional stability and other textile-like properties (Id., column 8 lines 43-45). Additionally, Bodford teaches that the composite prevents the strikethrough of potentially harmful liquids, such as blood, while still enabling the transmission of water vapor through a garment made to enhance user comfort (Id., column 8 lines 50-64). Additionally, Bodford teaches that the Examples illustrate the efficacy of the invention of Bodford for the manufacture of medical fabrics where there is a need not only for precluding passage of bacteria therethrough, but for precluding passage of viruses therethrough as well (Id., column 12 lines 7-15). Appellants' arguments are not persuasive as the claimed characteristics are taught by Bodford and it is reasonable for one of ordinary skill in the art to expect that a wearer of a surgical gown is a skilled user of protective clothing and would recognize such characteristics described by Bodford.

Additionally, Appellants appear to be arguing that the claimed subjective characteristics of the claimed invention are not inherent to the invention of Bodford. However, it is well-settled that unsupported arguments are not a substitute for objective evidence. *In re Pearson*, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974). Additionally, reliance on inherency is not required since Bodford teaches a substantially similar structure and composition as the claimed invention, the claimed invention is anticipated by and/or rendered obvious over the prior art.

Appellants argue that it would be assumed from Bodford that there would be no way to obtain good performance with a simpler structure because Bodford utilizes additional substrates. Examiner respectfully disagrees. The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. The scope of the claimed invention is

not limited to only those recited elements as the transitional phrase of the claim is “comprising.” Appellants do not provide evidence that the invention of Bodford necessarily does not comprise “good performance,” which is not claimed. Since Bodford teaches a substantially similar structure and composition as the claimed invention, the claimed invention is anticipated by and/or rendered obvious over the prior art.

Rejection of claims 15 and 16 under 35 U.S.C. 103(a) as being obvious over Wu in view of McCormack

Contrary to the current rejection, Appellants argue that one of ordinary skill and creativity would fail to produce claim 15 from a knowledge of Wu and McCormack. Examiner respectfully disagrees. Wu teaches a microporous laminate which is moisture vapor permeable but liquid impermeable which is soft and useful in garments where breathable and barrier properties are important, for example medical garments, to prevent the passages of body fluids or blood (Wu, column 2 lines 2-16). Wu teaches that the laminate comprises a microporous thermoplastic film such as a polyethylene film, and a nonwoven polypropylene fibrous web (Wu, column 3 line 59 to column 4 line 12). Wu teaches that the nonwoven web weighs from about 5 to 75 grams per square yard, and preferably about 20 to about 40 grams per square yard (Id., column 4 lines 26-29). It should be noted that 5 grams per square yard is equivalent to about 5.98 grams per square meter, 75 grams per square yard is equivalent to about 89.70 grams per square meter, 20 grams per square yard is equivalent to about 23.92 grams per square meter, and 40 grams per square yard is equivalent to about 47.84 grams per square meter. However, Wu

does not appear to teach the weight of the polyethylene and therefore the unit weight ratio of the polypropylene and polyethylene.

McCormack teaches a substantially similar breathable film/nonwoven composite suitable for use in gowns, comprising a linear low density polyethylene film and a polypropylene nonwoven (McCormack column 4 lines 3-11), wherein the polyethylene comprises from about 10 to about 68 weight percent of the film, (*Id.*, column 5 line 56 to column 6 line 7). McCormack teaches that the film will have a weight per unit area of less than about 100 grams per square meter and more desirably less than about 18 grams per square meter (*Id.*, column 8 lines 29-34), and McCormack teaches in an example that the polypropylene nonwoven may be 17 grams per square meter (*see* Example 1). Based on the teachings of McCormack, it is reasonable for one of ordinary skill in the art to expect that the polyethylene content of the film would range from about 10 to about 68 grams per square meter. Therefore, it would have been obvious to one having ordinary skill in the garment art at the time the invention was made to make the microporous polyethylene film of Wu with the film weight as taught by McCormack, motivated by the expectation of forming the microporous polyethylene film and polypropylene nonwoven protective clothing which is soft and breathable.

Once the prior art combination is formed, it naturally flows from the teachings of the prior art that the unit weight ratio of the polypropylene nonwoven of Wu, with the polyethylene film of McCormack, would comprise the range from about 8:92 to 90:10, based on the weight of the nonwoven being from about 5.98 to about 89.70 grams per square meter and the weight of the polyethylene in the film from about 10 to about 68 grams per square meter, or from about 83:17 to about 26:74 based on the preferred weight of the nonwoven. In the case where the

claimed ranges overlap or lie inside ranges disclosed by the prior art a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). Since the weight ranges and the weight ratios of the prior art overlaps with the claimed ranges, the claimed ranges are obvious over the prior art.

Additionally, based on the prior art, it would have been obvious to one of ordinary skill in the art to vary the weight of the nonwoven, based on the desired strength, softness and dimensional stability, and to vary the amount of the polyethylene film, based on the desired porosity, pore size, and thickness, suitable for the desired application. Therefore, since the prior art teaches a substantially similar structure and composition as the claimed invention, the claimed invention is rendered obvious over the prior art.

Rejection of claims 17-20 under 35 U.S.C. 103(a) as being obvious over Wu in view of McCormack, and further in view of Bodford

Contrary to the current rejection, Appellants argue that one of ordinary skill and creativity would fail to produce claim 15 from a knowledge of Wu, McCormack and Bodford. Examiner respectfully disagrees. It should be noted that Bodford is not relied on in combination with Wu and McCormack to teach the limitations of claim 15. Therefore, Appellants' arguments are not commensurate in scope with the present rejection. Additionally, as set forth above, Wu in view of McCormack teaches a substantially similar structure and composition as the claimed invention. Additionally, Bodford is only relied on to teach the thickness of the nonwoven. Therefore since the prior art combination teaches the limitations of claims 17-20, and since

Appellants' have not argued any deficiencies of Bodford with respect to claims 17-20, the prior art combination renders obvious the claimed invention, absent evidence to the contrary.

Rejection of claims 21 and 36 under 35 U.S.C. 103(a) as being obvious over McCormack in view of Langley

The obviousness rejection of claims 21 and 36 based on McCormack and Langley is withdrawn by Examiner.

Rejection of claims 21 and 36 under 35 U.S.C. 103(a) as being obvious over Bodford in view of Langley

Contrary to the current rejection, Appellants argue that one of ordinary skill and creativity would fail to produce claims 21 and 36 from a knowledge of Bodford and Langley, since Bodford fails to teach or infer polymer ratios. Examiner respectfully disagrees. As set forth above, Bodford teaches the claimed polymer ratios in Example 1. Since Bodford in view of Langley teaches each of the limitations of claims 21 and 36, and since Appellants' have not argued any deficiencies of Langley with respect to claims 21 and 36, the prior art combination renders obvious the claimed invention.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Peter Y Choi  
Examiner, Art Unit 1794

/Andrew T Piziali/  
Primary Examiner, Art Unit 1794

Conferees:

/Jennifer Michener/

QAS, TC1700

Jennifer Michener

/D. Lawrence Tarazano/

Supervisory Patent Examiner, Art Unit 1794

Larry Tarazano